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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,847	08/26/2003	Mark H. Machina	APTI:066	3853
	7590 06/24/200 <b>S &amp; McDOW</b> ELL LLI	EXAMINER		
20609 Gordon l	Park Square, Suite 150		CLEMENT, MICHELLE RENEE	
Ashburn, VA 20147			ART UNIT	PAPER NUMBER
			3641	
			MAIL DATE	DELIVERY MODE
			06/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/648,847	MACHINA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Michelle (Shelley) Clement	3641			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  (136(a). In no event, however, may a reply be tirwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 29 h	s action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) Claim(s) 1,2,4-10,12,14,15 and 18-25 is/are puda) Of the above claim(s) is/are withdra  5) Claim(s) is/are allowed.  6) Claim(s) 1,2,4-10,12,14,15 and 18-22 is/are re  7) Claim(s) 23-25 is/are objected to.  8) Claim(s) are subject to restriction and/o	wn from consideration. ejected. or election requirement. er.	Evaminar			
10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Expression of the second	drawing(s) be held in abeyance. Setion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)	() [] Into italia () []	(PTO 412)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate			

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### **DETAILED ACTION**

# Response to Arguments

1. Applicant's arguments filed 5/29/09 have been fully considered but they are not persuasive. In response to applicant's contention that the references do not disclose a raised portion that is configured to engage a bore of a firing device in order to induce relative rotation between the front and rear portion, it is noted the intended use of the claimed invention (or the intended use of an element of the claimed invention) must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Furthermore, it has been held that the recitation that an element is "configured to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentably sense. *In re Hutchinson*, 69 USPQ 138. It is noted, just as disclosed by applicant of the present projectile, if the projectiles of the prior were to be fired from a smooth bore, the bore would not induce relative rotation between the front and rear portions. Applicant's remaining arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 4, 5-10, 12, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor (US Patent # 2,044,819). Taylor discloses a projectile that can be fired from a firing device comprising; a hub (i.e. front/first portion) and a body (i.e. rear/second portion) (15, 5) extending from the hub, wherein the hub and the body are rotatably joined to each other to allow the hub and the body to rotate relative to each other at different rotational velocities when fired and until the projectile impacts a target, the rear portion includes a raised portion *configured* (i.e. have the ability) to engage a bore of a firing device. The hub has the ability to be broken (i.e. is frangible). The hub comprises a core and a plurality of fins (reference 19) extending outwardly from the core. The fins have the ability to break (i.e. are frangible) and have the ability to break and spread radially outwardly from the core as the hub penetrates a target. A leading portion of the fins is sloped at an angle (Figure 4). The hub and the body are rotatably joined with a bearing (reference 11). The projectile is stored and carried in a launching tube and due to the diameters shown both the hub and body have the ability to engage a bore. The [a)statements of intended use or field of use, b) "adapted to" or "adapted for" clauses, c) "wherein" clauses, or d) "whereby"]clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference. See In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 512 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

## See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647

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Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

3. Claims 1, 4-10, 14, 15 and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Alford et al. (US Patent # 5,452,864). Alford et al. discloses a projectile that can be fired from a firing device comprising; a first/front portion (reference 32) and second/rear portion (reference 31) extending from the first portion, wherein the first portion and second portion are rotatably joined to each other to allow the first portion and second portion to rotate relative to each other at different rotational velocities when fired and until the projectile impacts a target and wherein the first portion and second portion are configured (i.e. have the ability) to engage a bore of a firing device since the device is fired from a bore and there is nothing that would prevent the rear portion from engaging the bore. The first portion has the ability to be broken (i.e. is frangible). The first portion comprises a core and a plurality of fins extending outwardly from the core. The fins have the ability to break (i.e. are frangible) and have the ability to break and spread radially outwardly from the core as the hub penetrates a target. A leading portion of the fins is sloped at an angle. The first and second portions are rotatably joined with a bearing (reference 11). Both the hub and body have the ability to engage a bore and therefore it would be obvious for the projectile to engage a bore of the firing device when the projectile is fired from the firing device. In regards to claims 14, 15 and 18-22, Alford et al. discloses the apparatus comprising a firing device for firing a projectile, a cartridge has the ability of being chambered in the firing device, wherein the cartridge carries the projectile

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# Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor as applied to claim 1 above. Although Taylor does not expressly disclose that a second portion has less mass than the first portion, it is obvious from the figures that the portion containing the fins would have a mass less than the body portion and it has been held that discovering an optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

### Allowable Subject Matter

6. Claims 23-25 are objected to as being dependent upon a rejected base claim, but would possibly allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle (Shelley) Clement whose telephone number is 571.272.6884. The examiner can normally be reached on Monday thru Thursday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571.272.6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle (Shelley) Clement/ Primary Examiner, Art Unit 3641